

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MASSACHUSETTS
EASTERN DIVISION**

| | | |
|--------------------------------|---|---------------------|
| LONG HUA TECHNOLOGY CO., LTD., |) | |
| |) | |
| Plaintiff, |) | |
| |) | Civil Action No. |
| v. |) | |
| |) | Jury Trial Demanded |
| A123 SYSTEMS, LLC, |) | |
| |) | |
| Defendant. |) | |

COMPLAINT FOR PATENT INFRINGEMENT

Long Hua Technology Co., Ltd. (“Long Hua” or “Plaintiff”) brings this complaint for patent infringement against A123 Systems, LLC (“A123” or “Defendant”), and alleges as follows:

THE PARTIES

1. Long Hua is a corporation organized and existing under the laws of Taiwan (R.O.C.) with its principal place of business at 1F., No. 73, Tungmeng 2nd Rd., San Min District, Kaohsiung, Taiwan 80743 (R.O.C.).

2. Long Hua engages in the research, development, manufacturing, and sales of electronic components for smartphones, portable computers, and other consumer electronics products. Long Hua is an approved vendor for international technology companies, such as, Apple and Google.

3. A123 is a Delaware limited liability company with its principal place of business at 27101 Cabaret Drive, Novi, Michigan 48377.

4. A123 manufactures and supplies lithium ion battery products, including lithium iron phosphate or LFP batteries, that deliver high power, excellent safety, and outstanding life to various automotive, energy storage, and other companies around the world.

JURISDICTION AND VENUE

5. This action arises under the patent laws of the United States, 35 U.S.C. §§ 1 *et seq.* This Court has subject matter jurisdiction under 28 U.S.C. §§ 1331 and 1338(a).

6. A123 maintains at least two places of business in the District of Massachusetts: (i) 200 West St., Waltham, Massachusetts 02451 and (ii) 10 Avenue E, Hopkinton, Massachusetts 01748.

7. A123 regularly engages in business in Massachusetts by, for example, offering and selling battery products and services to customers in Massachusetts. These business activities include the here complained-of acts of patent infringement in Massachusetts, as more specifically set forth below.

8. This Court has personal jurisdiction over A123 because, among other things, A123 conducts business in Massachusetts and thus enjoys the privileges and protections of Massachusetts law.

9. Venue is proper in the District of Massachusetts under 28 U.S.C. §§ 1391 and 1400(b) because, among other things, A123 has incorporated and maintains a foreign limited liability company in Massachusetts.

ASSERTED PATENTS AND TECHNOLOGY

10. The patents-in-suit include U.S. Patent Nos. 7,803,484 (“the ’484 Patent”) and 8,034,480 (“the ’480 Patent”) (collectively, “Asserted Patents”).

11. On November 28, 2010, the U.S. Patent and Trademark Office (“USPTO”) duly and legally issued the ’484 Patent, entitled “High Rate Capability Design of Lithium Ion Secondary Battery,” to Hung-Chun Wu, Ching-Yi Su, Ping-Hsun Hsieh, Bing-Ming Lin, Mo-Hua Yang, and Nae-Lih Wu (collectively, “Inventors”). The ’484 Patent claims foreign priority to Taiwanese

Application No. 94147275, filed in the Taiwan Intellectual Property Office on December 29, 2005. A true and correct copy of the '484 Patent is attached herewith as Exhibit 1.

12. On February 24, 2006, the Inventors assigned their entire right, title, and interest in the '484 Patent to the Industrial Technology Research Institute ("ITRI") of Hsinchu, Taiwan. A copy of the Assignment recorded in the USPTO on March 21, 2006 at Reel 017702, Frame 0707, is attached herewith as Exhibit 2.

13. On October 11, 2011, the USPTO duly and legally issued the '480 patent, entitled "High Rate Capability Design of Lithium Ion Secondary Battery," to the Inventors. The '480 Patent is a straight continuation of the '484 Patent and contains a substantially identical disclosure as that of the '484 Patent, with claims of a different scope. A true and correct copy of the '480 Patent is attached herewith as Exhibit 3.

14. On September 6, 2019, ITRI assigned its entire right, title, and interest in the '484 and '480 Patents to Long Hua. A copy of the Assignment recorded in the USPTO on May 14, 2020 at Reel 052658, Frame 0247, is attached herewith as Exhibit 4.

15. The '484 and '480 Patents are directed to a lithium ion secondary (rechargeable) battery including a particular lithium compound, such as, lithium iron phosphate (LiFePO_4 or "LFP"), as a major component for its positive electrode active material. The Asserted Patents disclose and specifically claim a lithium ion secondary battery having certain area-to-thickness ratios of the positive electrode material, so as to achieve greater than 80% capacity ratio for 10C to 1C discharge rates.

16. In the relevant art, the discharge current of a battery is often referred to as a "C-rate" to normalize against battery capacities. A "1C rate" means that the discharge current will

discharge the entire battery in one (1) hour, while a “10C rate” means that the discharge current will discharge the entire battery in one-tenth (1/10) of an hour.

17. The '484 Patent at 2:33-37 defines the 10C to 1C capacity ratio (or 10C discharge capacity) as the ratio of (i) the capacity of a lithium ion secondary battery after being discharged at a 10C rate and (ii) the capacity of the same lithium ion secondary battery after being discharged at a 1C rate. The '484 Patent at 7:55-63 provides an example for measuring a battery's capacity after being discharged at the 1C and 10C rates.

18. On information and belief, no LFP battery can achieve greater than 80% capacity ratio for 10C to 1C discharge rates prior to the invention of the Asserted Patents.

COUNT I – INFRINGEMENT OF U.S. PATENT NO. 7,803,484

19. Long Hua re-alleges and incorporates the allegations of paragraphs 1-18 above.

20. Long Hua is the current assignee of the '484 Patent and has all substantial rights to enforce the '484 Patent, including the right to exclude others and to sue and recover damages for past and future infringement.

21. The '484 Patent is valid, enforceable, and was duly issued in full compliance with Title 35 of the United States Code.

22. A123 has infringed and continues to infringe directly and/or indirectly, either literally or under the doctrine of equivalents, at least claim 1 of the '484 Patent in violation of 35 U.S.C. § 271(a).

23. A123 is practicing the '484 Patent without permission from Long Hua. A123's infringement of the '484 Patent has injured and continues to injure Long Hua. Long Hua will continue to be irreparably harmed unless this Court enjoins A123.

24. A123 is given notice under 35 U.S.C. § 287(a) of the '484 Patent at least as early

as the filing date of this Complaint.

25. A123 directly infringes at least claim 1 of the '484 Patent under 35 U.S.C. § 271(a) by making, using, selling, offering for sale in the United States, and/or importing into the United States, without permission, consent, authority or license, lithium ion secondary battery products including, without limitation, A123's ANR26650M1B battery cells incorporated in the ALM[®] 12V7 battery of NEC Energy Solutions, and A123's UltraPhosphate[®] battery cells incorporated in the 48V LiFePO₄ battery (Model No. LR115327) of Jaguar and Land Rover.

COUNT II – INFRINGEMENT OF U.S. PATENT NO. 8,034,480

26. Long Hua re-alleges and incorporates the allegations of paragraphs 1-25 above.

27. Long Hua is the assignee of the '480 Patent and has all substantial rights to enforce the '484 Patent, including the right to exclude others and to sue and recover damages for past and future infringement.

28. The '480 Patent is valid, enforceable, and was duly issued in full compliance with Title 35 of the United States Code.

29. A123 has infringed and continues to infringe directly and/or indirectly, either literally or under the doctrine of equivalents, at least claim 1 of the '480 Patent in violation of 35 U.S.C. § 271(a).

30. A123 is practicing the '480 Patent without permission from Long Hua. A123's infringement of the '480 Patent has injured and continues to injure Long Hua. Long Hua will continue to be irreparably harmed unless this Court enjoins A123.

31. A123 is given notice under 35 U.S.C. § 287(a) of the '480 Patent at least as early as the filing date of this Complaint.

32. A123 directly infringes at least claim 1 of the '480 Patent under 35 U.S.C. § 271(a)

by making, using, selling, offering for sale in the United States, and/or importing into the United States, without permission, consent, authority or license, lithium ion secondary battery products including, without limitation, A123's ANR26650M1B battery cells incorporated in the ALM[®] 12V7 battery modules of NEC Energy Solutions, and A123's UltraPhosphate[®] battery cells incorporated in the 48V LiFePO₄ battery module (Model No. LR115327) of Jaguar and Land Rover.

PRAYER FOR RELIEF

WHEREFORE, Long Hua respectfully requests the following:

- A. A judgment that A123 has infringed one or more claims of the Asserted Patents;
- B. A judgment that each of the Asserted Patents is valid and enforceable;
- C. A judgment awarding Long Hua damages resulting from A123's infringement of the Asserted Patents;
- D. A judgment that A123 has willfully infringed the Asserted Patents;
- E. A judgment that the damages award be increased up to three times the actual amount assessed, pursuant to 35 U.S.C. § 284;
- F. A permanent injunction preventing A123, its officers, directors, attorneys, agents, servants, employees, parties in privity with, and all persons in active concert or participation with any of the foregoing, from infringing the Asserted Patent;
- G. A judgment requiring A123 to pay Long Hua costs, expenses, and prejudgment and post-judgment interest for A123's infringement of the Asserted Patents;
- H. A judgment finding that this is an exceptional case and awarding Long Hua its reasonable attorneys' fees pursuant to 35 U.S.C. § 285; and
- I. Such other relief as the Court deems just and proper.

DEMAND FOR JURY TRIAL

Long Hua respectfully demands a jury trial of all issues triable to a jury.

Respectfully submitted,

Dated: October 20, 2020

/s/ Hsuanyeh Chang
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**ATTORNEYS FOR PLAINTIFF
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